

# [POWER SUPPLY APPARATUS AND POWER SUPPLY CONTROL DEVICE]

## Abstract

A power supply apparatus is provided, which reduces undershoot of a DC source voltage when a power supply interrupt occurs. The power supply apparatus supplies a DC voltage to an output of the power supply apparatus, an output capacitor is provided between the power supply output and ground, and a resistor controls the discharge time constant when the supply of source voltage is temporarily halted. The resistor is coupled in series with a switch, forming a discharge path to ground for the output capacitor. A discharge path switch disables the discharge path when source voltage is supplied. The discharge path is enabled in the event of a power supply interrupt and disabled during normal power supply operation.